THE SOCIETY FOR VASCULAR TECHNOLOGY OF GREAT BRITAIN AND IRELAND

Professional Performance Guideline

Scan time guidance

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Suggestions for improvement of this guideline are welcome and should be sent to the Chair of the PSC see www.svtgbi.org.uk for current Chair details.

Introduction

This guideline was prepared by the Professional Standards Committee (PSC) of the Society for Vascular Technology (SVT) as a template to aid the clinical vascular scientist / vascular sonographers and other interested parties. It may be used in part or in its entirety with suitable additions made by local policy implementors.

Suggestions for improving this guideline are welcome and should be sent to the Chair of the PSC; see www.svtgbi.org.uk for current Chair details.

Purpose

The purpose of this document is to give managers a starting point for preparing workload and time/capacity planning – please see appendix 1.

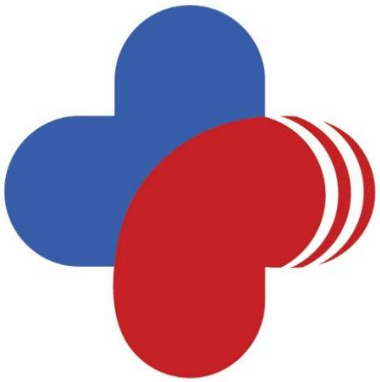
The following is a list of points that need to be considered when reading the table in Appendix 1:

1. Scan time versus reporting time

2. Image storage requirements
3. Reporting platform – PACS, CRIS, internal system, paper….
4. Is there a separate reporting room?
5. Is there a maximum number/limit on number of scans locally?
6. HCA availability/support in the unit
7. RSI issues need to be considered
8. Scan time quoted does not mean that we are doing the right thing
9. Time taken for each assessment is dependent on experience of the Clinical Vascular Scientist
10. Trainee times could be longer than that of an AVS
11. How in-depth is the scan (Aorta to ankle, BK deep veins for DVT, basic screening for carotids etc..
12. What is a sustainable/paced number of scans achievable on a routine basis?
13. Some units have an abundance of one type of scan - need to mix and match scan
14. Need to engage with colleagues in the unit so that they are aware that their job involves more than scanning
15. May be used as a starting point for planning clinics and scanning sessions
16. May be amended to suit local practice
17. May be used as documented support against unreasonable management requests
18. May be used to allocate non-scanning sessions for scientists with a recommendation of 20% time allocation for audit/research/CPD

REFERENCES:

1 The Society for Vascular Technology of Great Britain and Ireland. Service Specification Document https://www.svtgbi.org.uk/
2 https://www.sor.org/getmedia/f410ebaf-3317-47cb-b3f4-032de60fc0ed/ultrasound_examination_times_and_appointments.pdf_2
3 https://www.rcr.ac.uk/sites/default/files/quality-standard-for-imaging-qsi.pdf



THE SOCIETY FOR
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Vascular Technology Professional Performance Guidelines

Scan Time Guidance – Appendix 1

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TEST	TEST TIME	FUNCTION	INDICATION
Ankle and brachial index measurement (ABPI)/ Toe-Brachial Index (TBI).	30 minutes	Inflatable cuffs to determine any arterial insufficiency mainly in the lower limbs and toes. ABPI may be used to determine of compression bandaging is suitable for patients with leg swelling or ulceration. TBI: assess distal circulation particularly in diabetic patients where ABPIs appear falsely elevated due to calcified vessels.	• Intermittent claudication • Ischemic rest pain • Gangrene and ulceration. NICE recommends compression bandaging should be avoided where ABPI <0.8.
Pre and post exercise ABPI (treadmill testing).	45 minutes	ABPI measurements pre and post controlled exercise may be used to exclude or quantify the effects of disease in relation to claudication symptoms.	See above
Arterial Duplex (lower/upper limb)	45 minutes	To assess for occlusive and aneurysmal disease in the major lower limb and upper limb arteries.	• Claudication • Rest pain • Critical limb ischaemia • Evaluation of suspected subclavian steal syndrome, thoracic outlet syndrome and popliteal artery entrapment syndrome. • Ulceration and tissue loss
Thoracic outlet syndrome	45 minutes	Duplex of the subclavian/ axillary arteries at rest and on upper limb provocation. The presence of increased flow velocities, turbulence or cessation of flow in the vessel indication positive TOS.	• Tingling/ pain sensation in fingers.
DVT – upper/lower limb	30 minutes	Assess the deep and superficial venous system of upper and lower limb to detect any presence or absence of thrombosis.	• Unilateral swelling • Pain • Tenderness • ?source of PE
Venous Duplex (Lower limb)	45 minutes	To assess venous reflux stimulated by the muscle pump in the calf which is usually squeezed. To establish the source of any reflux identified in the superficial lower limb veins.	• Skin changes- eczema, hyperpigmentation, and ulcers. • Swelling • Pain • Venous claudication • Varicose veins

Vein Map	30 minutes	Assess the patency and size of the GSV down the leg. Some departments mark the vein prior to surgery. In some cases the SSV is assessed if GSV not available.	• Bypass surgery
Aortic Aneurysm Surveillance	30 minutes	Assess for occlusive and aneurysmal disease in the major arteries of the abdomen	• Men >65 • Strong family history • Incidental finding
EVAR surveillance	30 minutes	Routine surveillance post procedure to detect and evaluate complications that can arise which may result in potential aneurysm rupture. Looking out for endoleaks, sac growth, further aneurysm formation, in-stent stenosis and Stent kinking.	• Routine EVAR surveillance • Post-surgical intervention follow up • False aneurysm/ fluid collection at access site.
Renal artery	30 minutes	Assess the presence/ absence of stenosis and/or aneurysmal disease in the renal arteries.	• Uncontrolled high blood pressure • Renal artery stenosis/ parenchymal disease • Evaluation of renal transplant dysfunction
Visceral assessment-	30 minutes	Assess the splenic, superior mesenteric and inferior mesenteric arteries for stenosis or occlusion in chronic mesenteric ischaemia.	• Rapid weight loss • Chronic post prandial pain • Acute, intermittent abdominal pain • Post mesenteric angioplasty, stent, bypass graft
Arterial Fistula Surveillance	30 minutes	Assess the anatomy, patency and function of AVF or haemodialysis. Flow characteristics prior to fistula, within in and downstream from it are examined.	• Post-operative surveillance • Failing AVF • Difficult accessing for dialysis • Suspected steal syndrome • ?aneurysm/pseudoaneurysm

Assessment of graft patency (graft surveillance)	45 minutes	Assess the anatomy, patency and haemodynamic of the graft. Flow characteristics prior to graft, within graft and downstream (tibial arteries) are examined.	• Post operative surveillance • Stenosed graft • Claudication • Tissue loss • Rest pain
Carotid Duplex	30 minutes	Extracranial cerebrovascular u/s to assess presence of pathology and the haemodynamic status of the CCA, ICA, ECA and vertebral artery.	• TIA • Carotid bruit • Amaurosis fugax • Follow up of carotid stenosis • Post intervention- carotid endarterectomy or stent • Suspected subclavian steal syndrome • Trauma – dissection
Transcranial Doppler	30 minutes	To assess for presence/ absence of stenosis in the intracranial arterial flow.	• Unilateral weakness / paralysis • Memory problems • Aphasia
Temporal Artery	30 minutes	To assess the temporal and axillary arteries for the presence of inflammation suggesting Giant cell arteritis. Detecting all oedema throughout length of the vessel.	• Visual disturbance • throbbing headaches • sudden permanent loss of vision in one eye, • Tenderness of the scalp or over the temporal arteries • Jaw claudication.

General Comments

1. **All quoted values refer to a range up to the maximum time per scan**
2. **If bilateral Duplex is indicated, the time slots change from 45 minutes to 60 minutes**
3. **All quoted times are for guidance only**
4. **It is plausible to perform these scans quicker depending on complexity of disease and experience of the Clinical Vascular Scientist**
5. **The above table should be read in conjunction with the scan time PPG paragraph on the svtgbi.org.uk websit**